

GenCore version 5.1.4 p5 4578
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OM protein - protein search, using sw model

Run on: March 17, 2003, 08:48:26 ; Search time 17 Seconds
(without alignments)
1346.531 Million cell updates/sec

Title: US-10-010-227-3
Perfect score: 4055
Sequence: 1 MGAESTPQTLVYKVLQAHV.....KAVPVPTNRGEKEKPLEW 778

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 262574 seqs, 29422922 residues

Total number of hits satisfying chosen parameters: 262574

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%

Listing first 100 summaries

Database : Issued Patents_AA:*

- 1: /cgn2_6/ptodata/2/1aa/5A_COMB.pep:*
- 2: /cgn2_6/ptodata/2/1aa/5B_COMB.pep:*
- 3: /cgn2_6/ptodata/2/1aa/6A_COMB.pep:*
- 4: /cgn2_6/ptodata/2/1aa/6B_COMB.pep:*
- 5: /cgn2_6/ptodata/2/1aa/PCTUS_COMB.pep:*
- 6: /cgn2_6/ptodata/2/1aa/backfltest.pep:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	1300	32.1	461	4	US-09-134-001C-3892
2	1141.5	28.2	460	1	US-08-403-866-3
3	749	18.5	264	4	US-08-936-165A-477
4	635	15.7	424	4	US-09-173-300-45
5	528.5	13.0	428	4	US-09-173-300-36
6	523.5	12.9	443	4	US-09-173-300-38
7	493	11.2	173	4	US-08-936-165A-476
8	482.5	11.9	191	1	US-08-403-866-4
9	481.5	11.9	780	2	US-08-887-798-2
10	396	9.8	189	4	US-09-134-001C-3886
11	364.5	9.0	914	4	US-09-134-001C-5208
12	250	6.2	127	4	US-09-173-300-40
13	239	5.9	119	4	US-08-858-207A-388
14	209	5.2	263	4	US-09-173-300-51
15	208.5	5.1	195	4	US-09-173-300-42
16	196.5	4.8	244	4	US-09-173-300-47
17	195.5	4.8	244	4	US-09-173-300-53
18	187	4.6	257	4	US-09-173-300-49
19	137.5	3.4	126	4	US-09-173-300-44
20	131.5	3.2	2411	4	US-09-268-347-36
21	124.5	3.1	1912	3	US-08-409-995-4
22	124.5	3.1	1912	3	US-08-685-467-4
23	122.5	3.0	2353	4	US-09-377-155-33
24	122.5	3.0	2353	4	US-08-913-942-4
25	122.5	3.0	2353	4	US-09-669-974-33
26	122.5	3.0	2354	4	US-09-268-347-47
27	118	2.9	1477	4	US-09-206-892-71

28	115	2.8	823	3	US-08-481-435-4	Sequence 4, Appli
29	115	2.8	4551	3	US-09-320-878-1	Sequence 1, Appli
30	115	2.8	4613	4	US-09-105-537-31	Sequence 31, Appli
31	115	2.8	11877	4	US-09-105-537-6	Sequence 6, Appli
32	114	2.8	836	3	US-08-481-435-9	Sequence 9, Appli
33	114	2.8	2647	2	US-08-583-562B-8	Sequence 8, Appli
34	114	2.8	2647	2	US-08-779-113-8	Sequence 8, Appli
35	112	2.8	595	2	US-08-232-087A-2	Sequence 2, Appli
36	112	2.8	595	4	US-09-006-353A-9	Sequence 9, Appli
37	112	2.8	595	4	US-09-573-986-9	Sequence 9, Appli
38	112	2.8	844	3	US-08-481-435-7	Sequence 7, Appli
39	111.5	2.7	3052	2	US-08-557-122A-26	Sequence 26, Appli
40	111.5	2.7	3052	2	US-09-262-666-26	Sequence 26, Appli
41	111	2.7	844	3	US-08-481-435-8	Sequence 8, Appli
42	111	2.7	1861	4	US-08-790-912-4	Sequence 4, Appli
43	109	2.7	595	1	US-08-225-989-2	Sequence 2, Appli
44	109	2.7	595	1	US-08-570-923-2	Sequence 2, Appli
45	109	2.7	595	1	US-08-580-014-2	Sequence 2, Appli
46	109	2.7	595	1	US-09-079-785-2	Sequence 2, Appli
47	108	2.7	1477	1	US-08-038-682-4	Sequence 4, Appli
48	108	2.7	1477	1	US-08-302-832-4	Sequence 4, Appli
49	108	2.7	1477	2	US-08-530-198-4	Sequence 4, Appli
50	108	2.7	1477	2	US-08-469-880-4	Sequence 4, Appli
51	108	2.7	1477	2	US-08-728-470-4	Sequence 4, Appli
52	108	2.7	1477	2	US-08-617-697-4	Sequence 4, Appli
53	108	2.7	1477	2	US-08-719-641-4	Sequence 4, Appli
54	106.5	2.6	1150	2	US-08-589-756-3	Sequence 3, Appli
55	106.5	2.6	1150	2	US-09-206-800-3	Sequence 3, Appli
56	106.5	2.6	1150	4	US-09-206-898-3	Sequence 3, Appli
57	106.5	2.6	1167	2	US-08-589-756-2	Sequence 2, Appli
58	106.5	2.6	1167	4	US-09-206-800-2	Sequence 2, Appli
59	106.5	2.6	1167	4	US-09-206-898-2	Sequence 2, Appli
60	106	2.6	1841	2	US-08-804-227C-6	Sequence 6, Appli
61	106	2.6	3248	5	US-08-353-700-1	Sequence 1, Appli
62	106	2.6	3248	5	PCT-US95-16216-1	Sequence 1, Appli
63	106	2.6	5215	4	US-09-105-537-2	Sequence 2, Appli
64	105.5	2.6	1599	2	US-08-617-687-9	Sequence 9, Appli
65	104	2.6	921	4	US-09-206-800-10	Sequence 10, Appli
66	104	2.6	1638	4	US-09-071-035-258	Sequence 258, Appli
67	104	2.6	1638	4	US-09-071-035-262	Sequence 262, Appli
68	104	2.6	1638	4	US-09-071-035-266	Sequence 266, Appli
69	103.5	2.6	1181	4	US-09-206-898-23	Sequence 23, Appli
70	103.5	2.6	1376	1	US-08-420-235B-3	Sequence 3, Appli
71	103.5	2.6	1376	4	US-08-793-624-3	Sequence 3, Appli
72	103.5	2.6	1376	5	PCT-US95-10194-3	Sequence 11, Appli
73	102	2.5	921	4	US-09-206-800-11	Sequence 8, Appli
74	102	2.5	1786	4	US-08-973-462-8	Sequence 3790, Appli
75	101	2.5	409	4	US-09-134-001C-3790	Sequence 48, Appli
76	101	2.5	2048	4	US-09-268-347-48	Sequence 15, Appli
77	100.5	2.5	878	4	US-08-653-648A-15	Sequence 358, Appli
78	100.5	2.5	1074	4	US-09-071-035-358	Sequence 394, Appli
79	100.5	2.5	1074	4	US-08-588-983-16	Sequence 16, Appli
80	100	2.5	917	2	US-08-588-976-16	Sequence 16, Appli
81	100	2.5	917	2	US-09-105-537-4	Sequence 4, Appli
82	100	2.5	3782	4	US-09-504-356-6	Sequence 6, Appli
83	99	2.4	553	4	US-09-954-314-6	Sequence 6, Appli
84	99	2.4	553	1	US-08-712-241-2	Sequence 2, Appli
85	99	2.4	753	4	US-08-770-301A-1	Sequence 1, Appli
86	99	2.4	999	2	US-09-175-581-1	Sequence 3, Appli
87	99	2.4	999	3	US-09-306-998-3	Sequence 2, Appli
88	98.5	2.4	2037	4	US-07-642-734C-2	Sequence 2, Appli
89	98.5	2.4	3491	2	US-08-439-009A-2	Sequence 3, Appli
90	98.5	2.4	3491	4	US-08-699-103B-3	Sequence 3, Appli
91	97.5	2.4	994	4	US-09-229-059-3	Sequence 152, Appli
92	97.5	2.4	994	4	US-09-513-783A-152	Sequence 22, Appli
93	97.5	2.4	1125	4	US-08-471-119A-2	Sequence 4, Appli
94	97.5	2.4	1610	2	US-08-621-944A-4	Sequence 4, Appli
95	97.5	2.4	1833	4	US-08-945-567D-4	Sequence 3, Appli
96	97	2.4	1833	4	US-08-621-944A-3	Sequence 3, Appli
97	97	2.4	1992	4	US-08-945-567D-3	Sequence 2, Appli
98	97	2.4	1992	4	US-09-147-009-2	Sequence 2, Appli
99	96.5	2.4	516	4		
100						

ALIGNMENTS

RESULT 1
US-09-134-001C-3892
; Sequence 3892, Application US/09134001C
; Patent No. 6380370
; GENERAL INFORMATION:
; APPLICANT: Lynn Doucette-Stamm et al
; TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO STAPHYLOCOCCUS
; TITLE OF INVENTION: EPIDERMIDIS FOR DIAGNOSTICS AND THERAPEUTICS
; FILE REFERENCE: GTC-007
; CURRENT APPLICATION NUMBER: US/09/134, 001C
; CURRENT FILING DATE: 1998-08-13
; PRIOR APPLICATION NUMBER: US 60/064,964
; PRIOR FILING DATE: 1997-11-08
; PRIOR APPLICATION NUMBER: US 60/055,779
; PRIOR FILING DATE: 1997-08-14
; NUMBER OF SEQ ID NOS: 5674
; SEQ ID NO 3892
; LENGTH: 461
; TYPE: PRT
; ORGANISM: Staphylococcus epidermidis
US-09-134-001C-3892

Query Match 32.1%; Score 1300; DB 4; Length 461;
Best Local Similarity 54.7%; Pred. No. 2,7e-121;
Matches 258; Conservative 69; Mismatches 125; Indels 20; Gaps 5;

QY 9 QTLVDKVLQAHVDEKLDGTGTVLLYIDRLHVEHTVSPQAFGLRNAGRKVRPDCITLATTD 68
DB 8 QTLFDKVKKXVHLHKEGEPQLLYIDRLHVEHTVSPQAFGLRNAGRKVRPDCITLATTD 67
QY 69 HNVPTTSRKALKDIASFIKEDDSRTQCVTLNENKVEFGVTVYFGLSDKROGIVHVIGPEQG 128
DB 68 HNVPTTI-----DIFN-IKDEIAHKQITLLQONAKDFGVHIFDMGSDQEGIVHVMGPETG 120
QY 129 FTLPGTTVVCGDSHTSHGAFALAFAGTGTSEVHVLATQCLITKRSKNMRIQVDGELAP 188
DB 121 LTQPGKTIKVGDSHTSHGAFALAFAGTGTSEVHVLATQCLITKRSKNMRIQVDGELAP 180
QY 189 GVSSKDVVHLAIGIIGTAGTGAVIEFCGVSIRLSMEARMSICNMSIEGGARAGWAPD 248
DB 181 GYAKDIIILYINQYGVDFGTGVALEFTGTETIKNLSMEARMTICNMAIEAGAKYGLMQPD 240
QY 249 EITFEYLKGRPLAPKYDPSPEWHKATQVWKNLQSDPGAKYDIDVFIKADIVPTLTWGTSP 308
DB 241 EITFDVVKGRPVATDFDS-----SMAWKKLYSDDDAYFKVLELDTNLEPQVWGTNP 295
QY 309 EDVVPITGVVPPETPATEAKKADGRMLQYMGKLAGTGMEDIIPVDKVFISGCTNSRIED 368
DB 296 EMGVFSNFPF-----BIKNANDQRAVDYMGHLHPQKAEIDIKLGYVFLGSCINARLSD 348
QY 369 LRAAAAVKGRKAPNVKAMVVPVGSGLVKTQAEELGDKIFEEAGFEWREAGSCMLGM 428
DB 349 LIEASHIIKQOVHPNI-TAIVVPGSRTVKKEAEALGLDKLFDAGFEWREPGSCMLGM 407
QY 429 NPDILAPQERCASTSNRNFEGRQAGGRTHLMSPVMAAAAGIVGKLADVRKL 480
DB 408 NPDQVPEGVHCASTSNRNFEGRQAGGRTHLMSPVMAAAAGIVGKLADVRKL 459

RESULT 2
US-08-403-866-3
; Sequence 3, Application US/08403866
; Patent No. 5643779
; GENERAL INFORMATION:
; APPLICANT: Ehrlich, Stanislav
; APPLICANT: Godon, Jean-Jacques
; APPLICANT: Renault, Pierre
; TITLE OF INVENTION: Nucleic acid coding for an alpha-acetolactate

; TITLE OF INVENTION: synthase from Lactococcus and its applications
; NUMBER OF SEQUENCES: 16
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/403,866
; FILING DATE:
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Goldman, Michael L.
; REGISTRATION NUMBER: 30, 727
; REFERENCE/DOCKET NUMBER: 20747/30
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (716) 263-1600
; TELEFAX: (716) 263-1487
; TELEX: 978450 (WUT)
; INFORMATION FOR SEQ ID NO: 3:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 460 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; HYPOTHETICAL: NO
; ORIGINAL SOURCE:
; ORGANISM: Lactococcus lactis subsp. lactis
; INDIVIDUAL ISOLATE: LEUC
US-08-403-866-3

Query Match 28.2%; Score 1141.5; DB 1; Length 460;
Best Local Similarity 50.6%; Pred. No. 2e-105;
Matches 241; Conservative 60; Mismatches 154; Indels 21; Gaps 6;

QY 9 QTLVDKVLQAHVDEKLDGTGTVLLYIDRLHVEHTVSPQAFGLRNAGRKVRPDCITLATTD 68
DB 4 KTIKFDKLDQHVIAAGNEGEPEQLLYIDRLHVEHTVSPQAFGLRNAGRKVRPDCITLATTD 63
QY 69 HNVPTTSRKALKDIASFIKEDDSRTQCVTLNENKVEFGVTVYFGLSDKROGIVHVIGPEQG 128
DB 64 HNVPTQINFTQDLI-----SKQIDITFTKNVKEFDVPAETHGKGKGGIVHMAPESG 116
QY 129 FTLPGTTVVCGDSHTSHGAFALAFAGTGTSEVHVLATQCLITKRSKNMRIQVDGELAP 188
DB 117 RTQPGKTIKVGDSHTSHGAFALAFAGTGTSEVHVLATQCLITKRSKNMRIQVDGELAP 176
QY 189 GVSSKDVVHLAIGIIGTAGTGAVIEFCGVSIRLSMEARMSICNMSIEGGARAGWAPD 248
DB 177 GIYKDFILALIAKYGVVDAGVGYAVEYSGDAISDLSMEERMTICNMSIEFGAKIGLUMNPD 236
QY 249 EITFEYLKGRPLAPKYDPSPEWHKATQVWKNLQSDPGAKYDIDVFIKADIVPTLTWGTSP 308
DB 237 EKTVDYVKGREHAPK----NFDEAVSKWEKLVSDAQYDKILSDVSQLKPMVWGTNP 292
QY 309 EDVVPITGV-VPPDETATEAKKADGRMLQYMGKLAGTGMEDIIPVDKVFISGCTNSRIE 367
DB 293 -----GMGLFEKPEPEINNDLNYERAYQYMDLKPQTASDIDLGVIFIGSCINARLG 345
QY 368 LRAAAAVKGRKAPNVKAMVVPVGSGLVKTQAEELGDKIFEEAGFEWREAGSCMLGM 427
DB 346 LDEAAKIIIGDRHIADGL-TGIVVPGSRPVKEAAEQQLDKIFKAGFEWREPGSCACILG 404
QY 428 MNPDLAPQERCASTSNRNFEGRQAGGRTHLMSPVMAAAAGIVGKLADVRKL-TD 482
DB 405 MNPDIPEYVHCASTSNRNFEGRQAGGRTHLMSPVMAAAAGIVGKLADVRKL-TD 460
RESULT 3
US-08-936-165A-477
; Sequence 477, Application US/08936165A
; Patent No. 6348582
; GENERAL INFORMATION:

APPLICANT: Black, Michael
APPLICANT: Burnham, Martin
APPLICANT: Hodgson, John
APPLICANT: Knowles, David
APPLICANT: Lonetto, Michael
APPLICANT: Nicholas, Richard
APPLICANT: Pratt, Julie
APPLICANT: Reichard, Richard
APPLICANT: Rosenberg, Martin
APPLICANT: Ward, Judith
TITLE OF INVENTION: No. 6348582el Prokaryotic Polynucleotides,
NUMBER OF SEQUENCES: 534
CORRESPONDENCE ADDRESS:
ADDRESSEE: SmithKline Beecham Corporation
STREET: 709 Swedeland Road
CITY: King of Prussia
STATE: PA
COUNTRY: USA
ZIP: 19406-0939
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FASTSEQ for Windows Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/936,165A
FILING DATE: 24-SEP-1997
CLASSIFICATION: 536
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 60/027,032
FILING DATE: 24-SEP-1996
ATTORNEY/AGENT INFORMATION:
NAME: Gimm, Edward R
REGISTRATION NUMBER: 38,891
REFERENCE/DOCKET NUMBER: P50549
TELECOMMUNICATION INFORMATION:
TELEPHONE: 610-270-4478
TELEFAX: 610-270-5090
TELEX:
INFORMATION FOR SEQ ID NO: 477:
SEQUENCE CHARACTERISTICS:
LENGTH: 264 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: Protein
US-08-936-165A-477

Query Match 18.5%; Score 749; DB 4; Length 264;
Best Local Similarity 53.8%; Pred. No. 1.6e-66;
Matches 147; Conservative 39; Mismatches 75; Indels 12; Gaps 3;
QY 15 VLAHVVDKLDGTVLLYIDRLVHEVTSPOAFEGRLNAGRKRVRPDDCTLATTDHNVPTT 74
DB 1 VVNRHVLA XGKKGDPQLLYIDHLIHEVTSPOAFEGRLQNRLRPRDPTFATLDHNVPTI 60
QY 75 SRRLKLIASFIRKEDDSRTQCVTLEENVKEFGVTFYFGISDRQGIYVHYIGPQGTLPPT 134
DB 61 -----DIFN-IKQINIKKQITTLQKKAIDFGVHFDWGSDEQGIYVHWGPTGLTOPER 113
QY 135 TVVCGDSHTSTHGAFALFGIGTSEVEHVLATQCLITKRSKNMRYOVDELAPGVSSKD 194
DB 114 TVVCGDSHTATHGAFALFGIGTSEVEHVLATQTLMTKPKNLIDINGTLPPTGVYARD 173
QY 195 VVLAIGIIGTAGTGAIVIEPCGVIRSLSEARMSICMSIEGARAQWVADEITFEY 254
DB 174 IILHLITGVDFGVALFETGETIKLNSMDGRWTCMAIEGAKKGIIDPDITFEY 233
QY 255 LKGRPLAPKIDSEPMHKAQYWKULQSPGAKY 287
DB 234 VKGRPFADNF-----AKSVDMKRELYSDDITRY 261

RESULT 4
US-09-173-300-45
Sequence 45, Application US/09173300
Patent No. 6451581
GENERAL INFORMATION:
APPLICANT: Falco, Saverio Carl
APPLICANT: Hiltz, William D.
APPLICANT: Kinney, Anthony J.
APPLICANT: Cahoon, Rebecca E.
APPLICANT: Rafalski, J. Antoni
TITLE OF INVENTION: PLANT BRANCHED CHAIN AMINO ACID BIOSYNTHETIC ENZYMES
FILE REFERENCE: BB-1126
CURRENT APPLICATION NUMBER: US/09/173,300
CURRENT FILING DATE: 1998-10-15
EARLIER APPLICATION NUMBER: 60/063,423
EARLIER FILING DATE: 1997 October 28
NUMBER OF SEQ ID NOS: 54
SOFTWARE: Microsoft Word Version 7.0A
SEQ ID NO 45
LENGTH: 424
TYPE: PRT
ORGANISM: Methanococcus jannaschii
US-09-173-300-45

Query Match 15.7%; Score 635; DB 4; Length 424;
Best Local Similarity 33.1%; Pred. No. 9.2e-55;
Matches 157; Conservative 86; Mismatches 174; Indels 58; Gaps 9;

QY 10 TLYDKVL-QAHVVDKLDGTVLL-YIDRLVHEVTSPOAFEGRLNAGRKRVRPDDCTLAT 66
DB 4 TIVEKILARASGKEVSPGIDVAMVIDITGLTVNTLKEYIEIKVMDEKIVIL 63
QY 67 TDHNVPTTSRKALXDIASFIRKEDDSRTQCVTLEENVKEFGVTFYFGISDRQGIYVHYIGPE 126
DB 64 FHVQVADSIKAE-----HILMKFVYEQIKTF--YDREGVGHQVLP 108
QY 127 QGFTLPGTVVCGDSHTSTHGAFALFGIGTSEVEHVLATQCLITKRSKNMRYOVDEL 186
DB 109 KGVHAPGEVYVCGADSHITGHGAFATGISTDMAHVFATGMLFVPEITVYINIGDL 168
QY 187 APGVSSKDVVLAIGIIGTAGTGAIVIEPCGVIRSLSEARMSICMSIEGARAQWVA 246
DB 169 QPVYTSKDVILSIIIGVGDATYKACQFGFETVKKMSIASRMTMTMAIEMGSGTGIIE 228
QY 247 PDEITFEYLKGRPLAKRVPSEMHKAQYWKULQSPGAKYDIDVIFDADIYPTLTWGT 306
DB 229 PDEKITQYVK-----EAMKRHGTREPREVIKGDDEAFEAUYEIEADKIEVFACPH 280
QY 307 SPEDVVPITGVVPDPTFATEAKKADGRMLQYMLKAGTPMEDIPVDKYFISGCTNSRI 366
DB 281 NVDNV-----KQAREVAK-----PIDQYFISGCTNGRL 309
QY 367 EDLRAAAVVKGRKAPNYKSAMVVPFSGGLVKTQAEDEGLDKIFEAGFEWRAGCMCL 426
DB 310 EDLRMAIKIIEKHGIAADVVRVVTPASREBYLKALEKGIIEKFLKGCVVATNPSGACM 369
QY 427 GAMPDLAQERCASTSNRNFEBRQGA-GGRTILMSVMAAAGIYVKLADVRL 480
DB 370 GSLVGLVGEVGVSTSNRNFGRQSLAEAIYLAISPTAAACAVKGLVDPRL 424

RESULT 5
US-09-173-300-36
Sequence 36, Application US/09173300
Patent No. 6451581
GENERAL INFORMATION:
APPLICANT: Falco, Saverio Carl
APPLICANT: Hiltz, William D.
APPLICANT: Kinney, Anthony J.
APPLICANT: Cahoon, Rebecca E.
APPLICANT: Rafalski, J. Antoni
TITLE OF INVENTION: PLANT BRANCHED CHAIN AMINO ACID BIOSYNTHETIC ENZYMES

```
; FILE REFERENCE: BB-1126
; CURRENT APPLICATION NUMBER: US/09/173,300
; CURRENT FILING DATE: 1998-10-15
; EARLIER APPLICATION NUMBER: 60/063,423
; EARLIER FILING DATE: 1997 October 28
; NUMBER OF SEQ ID NOS: 54
; SOFTWARE: Microsoft Word Version 7.0A
; SEQ ID NO 36
; LENGTH: 428
; TYPE: PRT
; ORGANISM: Zea mays
US-09-173-300-36
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Query Match 13.0%; Score 528.5; DB 4; Length 428;
Best Local Similarity 31.9%; Pred. No. 4.3e-44;
Matches 152; Conservative 65; Mismatches 165; Indels 95; Gaps 16;

QY 33 IDRLHVEHTSPQA---FGLRNAGRKVRPPDCTLATTDHNVPTTSRKALKDIASFIKED 89
Db 12 IDVLMTHDVCGBGTGIFKKEFGEDAKWDREKVIIPDHYIPTSERANRV-----D 65
QY 90 DSRTCQVTLLEENKVEFGVTYF-----GLSDKR-----QGIVHVIQPEQGFPLGTTVVCGD 140
Db 66 ILRDFC--LEQNIK-----YFYDIKDLSDFRANPDYKGVCHIALAQEGHCRPGEVLLGTD 118
QY 141 SHTSTHGAFGALAFGIGTSEVEHVLATQCLITKRSKNMRIQVDGELAPGVSSKDVVLHAI 200
Db 119 SHTCNAGAFGQFATGIGNTDAGVMTGKALLKVPPTIRFVLGDEMPPYLLAKDLILQII 178
QY 201 GIIGTAGGTGAVIEFCGVSIRISMEARMSICNMSTEGGARAGMVPADETTFEYLKGRPL 260
Db 179 GEISVSGATYKSMFVGSTVESLTMEERMTLCNMVVEAGKNGVVPADETTFKYLEGR-- 236
QY 261 APKYDSEPMHKAQYWKNLQSDPGAKYDIDVFIDAKDIVPTLTWTGTSPEDEVVPIITGVVPD 320
Db 237 -----TSVDYQPVYSDAEARFFSDYRFDVSKLEPVV---AKPHS-----PD 274
QY 321 PETFATEAKKADGRMLQYMGKLAGTPEMDIPVDKVFIGSCNRSRIEDLRAAAIVVKGK 380
Db 275 NRALARECK-----DVKIDRVYIGSGTGGKTEDEFLAAAKVFLASG 314
QY 381 KAPNVKSAMV-----VPGSLVKTQAEEGGLDKIFEEAGFEW-REAGCSMC 425
Db 315 KKVKVPFTLVPAQTKWMDVYSLVPVPGSG-GKTCQO-----IFEEAGCDTPASPNCGAC 367
QY 426 LGMNPDIILAPOER---CASTSNRNFEGRQG-AGGTRHLMSPVMAAAAGIVGKLADVR 478
Db 368 LGGPRDTYARMNEPTVCVSTTNRNFPGRMGHKEGQIYLASPYTAAASALTGYVTDPR 424

RESULT 6
US-09-173-300-38
; Sequence 38, Application US/09173300
; Patent No. 6451581
; GENERAL INFORMATION:
; APPLICANT: Falco, Saverio Carl
; APPLICANT: Hitz, William D.
; APPLICANT: Kinney, Anthony J.
; APPLICANT: Cahoon, Rebecca E.
; APPLICANT: Rafalski, J. Antoni
; TITLE OF INVENTION: PLANT BRANCHED CHAIN AMINO ACID BIOSYNTHETIC ENZYMS
; FILE REFERENCE: BB-1126
; CURRENT APPLICATION NUMBER: US/09/173,300
; CURRENT FILING DATE: 1998-10-15
; EARLIER APPLICATION NUMBER: 60/063,423
; EARLIER FILING DATE: 1997 October 28
; NUMBER OF SEQ ID NOS: 54
; SOFTWARE: Microsoft Word Version 7.0A
; SEQ ID NO 38
; LENGTH: 443
; TYPE: PRT
; ORGANISM: Zea mays
US-09-173-300-38
```

```
Query Match 12.9%; Score 523.5; DB 4; Length 443;
Best Local Similarity 30.9%; Pred. No. 1.1e-43;
Matches 147; Conservative 69; Mismatches 164; Indels 95; Gaps 14;

QY 33 IDRLHVEHTSPQAFEGLR--NAGRKVRRPDC'LATTDHNVPTTSRKALKDIASFIKED 89
Db 27 VDVLMTHDVCGPGAFDIFKKEFGEDARWDBREKLVIPDHYIPTS'DGAKRNV-----D 80
QY 90 DSRTCQVTLLEENKVEFGVTYF-----GLSDKR-----QGIVHVIQPEQGFPLGTTVVCGD 140
Db 81 ILRDFCA--EONIK-----YFYDIKDLSDFRANPDYKGVCHIALAQEAHCRPGEVLLGTD 133
QY 141 SHTSTHGAFGALAFGIGTSEVEHVLATQCLITKRSKNMRIQVDGELAPGVSSKDVVLHAI 200
Db 134 SHTCNAGAFGQFATGIGNTDAGVILGTGKALLKVPPTIRFVLGDEMPPYLLAKDLILQII 193
QY 201 GIIGTAGGTGAVIEFCGVSIRISMEARMSICNMSTEGGARAGMVPADETTFEYLKGRPL 260
Db 194 GEISVSGATYKSMFVGSTVESLTMEERMTLCNMVVEAGKNGVVPADETTFKYLEG--- 250
QY 261 APKYDSEPMHKAQYWKNLQSDPGAKYDIDVFIDAKDIVPTLTWTGTSPEDEVVPIITGVVPD 320
Db 251 -----KTSVDYBPVYSDAQARFFSDYRFDVSKLEPVVAKPHSPDNRAP----- 293
QY 321 PETFATEAKKADGRMLQYMGKLAGTPEMDIPVDKVFIGSCNRSRIEDLRAAAIVVKGK 380
Db 294 -----ARECK-----DVKIDRVYIGSGTGGKTEDEFLAAAKVFLASG 329
QY 381 KAPNVKSAMV-----VPGSLVKTQAEEGGLDKIFEEAGFEW-REAGCSMC 425
Db 330 KKVKVPFTLVPAQTKWMDIYSLVPVPGSG-----GKTCQIFEEAGCDTPASPNCGAC 382
QY 426 LGMNPDIILAPOER---CASTSNRNFEGRQG-AGGTRHLMSPVMAAAAGIVGKLAD 476
Db 383 LGGPRDTYARMNEPTVCVSTTNRNFPGRMGHKEGQIYLASPYTAAASALTGYVTD 437

RESULT 7
US-08-936-165A-476
; Sequence 476, Application US/08936165A
; Patent No. 6348582
; GENERAL INFORMATION:
; APPLICANT: Black, Michael
; APPLICANT: Burnham, Martin
; APPLICANT: Hodgson, John
; APPLICANT: Knowles, David
; APPLICANT: Lonetto, Michael
; APPLICANT: Nicholas, Richard
; APPLICANT: Pratt, Julie
; APPLICANT: Reichard, Richard
; APPLICANT: Rosenberg, Martin
; APPLICANT: Ward, Judith
; TITLE OF INVENTION: No. 6348582el Prokaryotic Polynucleotides,
; POLYPEPTIDES AND THEIR USES
; NUMBER OF SEQUENCES: 534
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: SmithKline Beecham Corporation
; STREET: 709 Swedeland Road
; CITY: King of Prussia
; STATE: PA
; COUNTRY: USA
; ZIP: 19406-0939
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette
; COMPUTER: IBM Compatible
; OPERATING SYSTEM: DOS
; SOFTWARE: FastSeq for Windows Version 2.0
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/936,165A
; FILING DATE: 24-SEP-1997
; CLASSIFICATION: 536
; PRIOR APPLICATION DATA:
```

```
Qy      8 PQTLYDKVLOAHVD-----EKLDTGLVLLYDRHLVHEVTSPQAEEGLEKNAG-RKYRRP 60
        |||:::||:||||||:::|||
Db     62 PLTISEKIVGHLDLPASQETERGSKYLRLRPRVAMQDATQMMLQFTISSGLSKAVP 121
```

QY 61 DCTLATTHNVPTTSRKALKDIASFIEDDSRTQCVTLEENVKEF-----GVTV-FGLSDK 115
Db 122 --STIHCDBLIE-----AQVGKDLR-RAKIDINQVNFATAGAKYGVGFWK 168
QY 116 ROGIVHVHGPBGFTLPGTIVVCGDSHTTHGAFGALAFGIGTSEVHVLAOCITKRS 175
Db 169 GSGIITHQILE-NYAYPPGVLITGDSHTTNGGGLGICIGVGADAVDMAGIPWELKCP 227
QY 176 KNMRTQVDELAPGVSSKDVVLAHIGITAGTGAVIEFCGVSIRSLSMEARMSCNMS 235
Db 228 KVIGKLTGSLSGWSKDPKVLKVAIGLTVKGTGAIVHVGCVDSISCTGNATCNMG 287
QY 236 IEGGARAGVAPDEITFEYLK-GR-PLAPKYDSPWHKATQYWKQLSDPDGAKYDIDVF 292
Db 288 AEIGATTVPYHNRMKKYLKTGREDIA-----NLADBEKDLVDPGCHYDQIE 339
QY 293 IDAKDIVPTLWGTSPEDVVPITGVVDPDETFATEAKKADGRMLQYMGKAGTPEMDIP 352
Db 340 INLSELKPHINGPFTPDLAHPVAEV-----GKVAE-----KEGML-DIR 378
QY 353 VDKVFIGCTNSRIEDLRAAAVVK-----GRKKA PNKVSAM-VVPGSLVKTQAEIEGL 406
Db 379 VG--LIGSCTNSYEDMGSAVAKQALAHGFK-----CKSQFTITPGSEQIRATIERDGY 432
QY 407 DKIFEEAGPEWREAGCGMCLGM--NPDI LAPQERCASTS-NRNFEGRQAGGRTH--LMS 461
Db 433 AQILRLDGLGIVLANAGCGICQWDRKDIKKEKNTIVTSYNNFTGRNDANPETHAFVTS 492
QY 462 PWMAAAGIVGLKADVRKLTVDYKASPHIAAYQKSTVTKPHVDE-----RINQDAHEKDI 515
Db 493 PEIVTALAIAAGTL-KFNPETDITLG---TDGKKFRLEAPDADELPKGEFDPGQDTYQHP- 547
QY 516 IADIPEDNNGPHTNSASVGTSGAGLPKFTILKG-----IAAPL 553
Db 548 ----PKDSSGQVDSVPTSQRIQLLEPFPKWDGKDLIEDIQLIKVKGKCTTDHISAAGPW 603
QY 554 EK-----ANVDTDAIPKQFLKTKRTGLGNALFYEMRNEDGTEKSDFFVLNKEPVKAS 608
Db 604 LKFRGHLDNISNLLIGAINIENGKANSVRNAVTFQFGPVPD-----TARYYKKG 654
QY 609 I--LVCTGANFCGSSREHAPWALNDFGIRSVIAPSFADIFFNNSFKNGMLPIPKDOAQ 666
Db 655 IRWVIGDENYEGSSREHAALPRHLGGRATITKSFARIHETNLKKGGLPLTFADPAD 714
QY 667 IEAI-----AAEARAGKEIEVDLPNQLIK--NATGETIC---TF---EVEEPRKH 708
Db 715 YNKIHVPVKLTTOGLKDFTPGPKLK-----IINKHNGTOETILLNHTFNETQIEWFRAG 769
QY 709 CLVNGLDDI 717
Db 770 SALNRMKEL 778

RESULT 10
US-09-134-001C-3886
; Query Match 9.8%; Score 386; DB 4; Length 189;
; Best Local Similarity 47.3%; Pred. No. 2e-31;
; Matches 89; Conservative 29; Mismatches 62; Indels 8; Gaps 4;
; GENERAL INFORMATION:
; APPLICANT: Lynn Doucette-Stamm et al
; TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO STAPHYLOCOCCUS
; FILE REFERENCE: GTC-007
; CURRENT APPLICATION NUMBER: US/09/134,001C
; PRIOR FILING DATE: 1998-08-13
; PRIOR APPLICATION NUMBER: US 60/064,964
; PRIOR FILING DATE: 1997-11-08
; PRIOR APPLICATION NUMBER: US 60/055,779
; PRIOR FILING DATE: 1997-08-14
; NUMBER OF SEQ ID NOS: 5674
; SEQ ID NO 3886
; LENGTH: 189
; TYPE: PRT
; ORGANISM: Staphylococcus epidermidis

US-09-134-001C-3886

Query Match 9.8%; Score 396; DB 4; Length 189;
Best Local Similarity 47.3%; Pred. No. 2e-31;
Matches 89; Conservative 29; Mismatches 62; Indels 8; Gaps 4;
QY 544 TILKGIAAPLEKANVDTDAIPKQFLKTKRTGLGNALFYEMRNEDGTEKSDFFVLNKEP 603
Db 7 TIVTGTVPFLFYDNIDTDQIIPKVLKRVSKSGFPAFDEWRYLPDGSNDPDPNPKPE 66
QY 604 YRKASILLVCTGANFCGSSREHAPWALNDFGIRSVIAPSFADIFFNNSFKNGMLPIPKD 663
Db 67 YHGASILLI-TGDNFGCGSSREHAAWALKDYGFNIIAGSFSDIFFMNCTKNAMLPICL-N 124
QY 664 QAQIEALAEARAGKEIEVDLPNQLIKNATGETICTFEVEEPRKHCLVNGLDDIGLTMQM 723
Db 125 OKEREHLA---QFDEITVDLPNQTV---STVSQSQSFHFDIDETWKNKLIHGLDDIAITLQF 178
QY 724 EDKIAEFE 731
Db 179 ENLIEKYE 186

RESULT 11

US-09-134-001C-5208
; Query Match 9.0%; Score 364.5; DB 4; Length 914;
; Sequence 5208, Application US/09134001C
; Patent No. 6380370
; GENERAL INFORMATION:
; APPLICANT: Lynn Doucette-Stamm et al
; TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO STAPHYLOCOCCUS
; FILE REFERENCE: GTC-007
; CURRENT APPLICATION NUMBER: US/09/134,001C
; CURRENT FILING DATE: 1998-08-13
; PRIOR APPLICATION NUMBER: US 60/064,964
; PRIOR FILING DATE: 1997-11-08
; PRIOR APPLICATION NUMBER: US 60/055,779
; PRIOR FILING DATE: 1997-08-14
; NUMBER OF SEQ ID NOS: 5674
; SEQ ID NO 5208
; LENGTH: 914
; TYPE: PRT
; ORGANISM: Staphylococcus epidermidis
US-09-134-001C-5208

Query Match 9.0%; Score 364.5; DB 4; Length 914;
Best Local Similarity 22.5%; Pred. No. 4.3e-27;
Matches 208; Conservative 129; Mismatches 335; Indels 253; Gaps 40;
QY 9 QTLYDKVLQAHVDEKLDGTVLLYIDRHLVHE-----VTSPQAFEGELNAGRKVRR 59
Db 39 QTLLEKGL-AKI--SKLPYSIRVLLESVLROEDDFVITDDHIKALKSKFGNAGNEGEVPFK 95
QY 60 PDCITLATIDHNVP-----TTSRKALKDIAFPK-----EDSRTQCVTL 98
Db 96 PSRVILQDFTGVPVAVDVLASLRKAMNDVGGDKINPEVPVDLVIDHSVQVDSYANPEAL 155
QY 99 EENVK-EFGVTY-----FGLSDKROGIVH-----VIGPEQ 127
Db 156 ERNKLFEERNERYQFLNWKATKAFDYNVAVPPATGIVHOVNLEYLANVVHVRDVGEXT 215
QY 128 GF--TLPGTTVCGDSHTSTHGAFGIGTSEVHVLAOCITKRSKNMRIQVDGE 185
Db 216 AFPDPLVGT-----DSHTTMINGIGVLGWGGIEAEAGMLGPSVFPIPEVIGVRLTHS 270
QY 186 LAPGVSSKDVVLAHIGITAGTGAVIEFCGVSIRSLSMEARMSICNMSIEGGARAGW 245
Db 271 LPQSGSTATDLARVTELRKGVGKVFVEFFGPGVQHPLADRATIANWAPETGATCGFF 330
QY 246 APDEITFEYLK--GR-----PLAPKYDSPWHKATQYWKQLSDPDGAKYDIDVFIDAKDI 298
Db 331 PVDRESLYMKLTGRDEHIELVKEY-----LQONHMFDFVEKEDP--EYTDVIDLDSLTV 384


```
Db 117 WQD 119
; ORGANISM: Glycine max
; FEATURE:
; NAME/KEY: UNSURE
; LOCATION: (93)
US-09-173-300-42

Query Match 5.1%; Score 208.5; DB 4; Length 195;
Best Local Similarity 28.5%; Pred. No. 1.2e-12;
Matches 65; Conservative 26; Mismatches 80; Indels 57; Gaps 8;

QY 271 KATQYKMLQSDPGAKYDIDVFIDAKDIVPTLTWGTSPEDVVPITGVVDPDETATEAKK 330
Db |:::|:::|:::|:::|:::|:::|:::|:::|:::|:::|:::|:::|:::|:::|:::|:::|
4 KTSLPYEPVYSDQARFLAEYRFDVSKLEPVV---AKPHS-----PDNRALARECK- 51
QY 331 ADGRRMLQVMGLKAGTPMEDIPVDKVFISGCTNSRIEDLRAAAAVVKRKKAPNVKSAMV 390
Db |:::|:::|:::|:::|:::|:::|:::|:::|:::|:::|:::|:::|:::|:::|:::|
52 -----DVKIDRVVIGSTGCTKEDFMAAAKVFLASGQVKVPTFLV 92
QY 391 -----VPGSLVKTQAEELDKKPEEAGFEW-REAGCSMCLGMNPDILAP 435
Db |:::|:::|:::|:::|:::|:::|:::|:::|:::|:::|:::|:::|:::|:::|:::|
93 XATQKVMMDLYSLPVGSG-----GKTCQIFEEVGCOTPASPCGACILGGPKDTYAR 145
QY 436 QER---CASTSNENFEGROG-AGRTHLMSPVMAAAGIVGKLADVRK 479
Db |:::|:::|:::|:::|:::|:::|:::|:::|:::|:::|:::|:::|:::|:::|:::|
146 MNEPKVCVSTNRRNFGRMGHEGQIYLASPYTAASALTGYVTDPRE 193

RESULT 16
US-09-173-300-47
; Sequence 47, Application US/09173300
; Patent No. 6451581
; GENERAL INFORMATION:
; APPLICANT: Falco, Saverio Carl
; APPLICANT: Hitz, William D.
; APPLICANT: Kinney, Anthony J.
; APPLICANT: Cahoon, Rebecca E.
; APPLICANT: Rafalski, J. Antoni
; TITLE OF INVENTION: PLANT BRANCHED CHAIN AMINO ACID BIOSYNTHETIC ENZYMES
; FILE REFERENCE: BB-1126
; CURRENT FILING DATE: 1998-10-15
; EARLIER APPLICATION NUMBER: 60/063,423
; EARLIER FILING DATE: 1997 October 28
; NUMBER OF SEQ ID NOS: 54
; SOFTWARE: Microsoft Word Version 7.0A
; SEQ ID NO 51
; LENGTH: 263
; TYPE: PRT
; ORGANISM: Glycine max
; FEATURE:
; NAME/KEY: UNSURE
; LOCATION: (4)
US-09-173-300-51

Query Match 5.2%; Score 209; DB 4; Length 263;
Best Local Similarity 31.9%; Pred. No. 1.8e-12;
Matches 58; Conservative 29; Mismatches 61; Indels 34; Gaps 7;

QY 526 PHNTSASVGTSGALPKFTILKGIAAPLEKANVDTDAIIPKQFLKTY-----KRTG-- 576
Db |:::|:::|:::|:::|:::|:::|:::|:::|:::|:::|:::|:::|:::|:::|:::|
72 PRAQSAASPSASPHGLCVVG-----DNIDTQIIPAEYLTLPVSKPDEYKLGSY 124
QY 577 --LGNALFYEMFNEPDGTSKDFVLNKEPYRKASILVCTGANFGCGSSREHAPWALNDFG 634
Db |:::|:::|:::|:::|:::|:::|:::|:::|:::|:::|:::|:::|:::|:::|:::|
125 ALIGLPATYATRFIEPGEIKTYA-----IVIGGANFGCGSSREHAPVALGASG 173
QY 635 TRSVTAPSPADTFENNSFKNGMLPIPIKDAQIEATAAEARAGKETEVDL-PNOLIKNAT 693
Db |:::|:::|:::|:::|:::|:::|:::|:::|:::|:::|:::|:::|:::|:::|:::|
174 AARVAESYARIFFRNSVATGEV-YPLESEGR---LCEECTTGDVVTVIELGESRLNHTT 229

QY 694 GE 695
; LENGTH: 231
; TYPE: PRT
; ORGANISM: Glycine max
; FEATURE:
; NAME/KEY: UNSURE
; LOCATION: (4)
US-09-173-300-42

Query Match 4.8%; Score 196.5; DB 4; Length 249;
Best Local Similarity 33.1%; Pred. No. 3e-11;
Matches 59; Conservative 24; Mismatches 60; Indels 35; Gaps 8;

QY 531 SASVGTSGALPKFTILKGIAAPLEKANVDTDAIIPKQFL-----KTIKRTGLGNALF--- 582
Db |:::|:::|:::|:::|:::|:::|:::|:::|:::|:::|:::|:::|:::|:::|:::|
54 AAAAGSSS--PSSAVFHGECFVGD-NIDTQIIPAEHLTLVPSKPDEYRKLGSFAFAGL 110
QY 593 -----YEMRFNEDGTEKSDFLVNKEPYRKASILVCTGANFGCGSSREHAPWALNDFGIRSV 638
Db |:::|:::|:::|:::|:::|:::|:::|:::|:::|:::|:::|:::|:::|:::|:::|
111 PSAAYPFPFVAPGESSRYA-----IIVGANFGCGSSREHAPVALGAAGARAI 159
QY 639 IAPSFADIFFNNSFKNG-MLPIPIKDAQIEAIAA--EARAGKETEVDLPNOLIKNAT 693
Db |:::|:::|:::|:::|:::|:::|:::|:::|:::|:::|:::|:::|:::|:::|:::|
160 VAEGYARIFFRNSVATGEVYPLELTD-----VGAWECKTGDVVTVDLANSVFINTT 211

RESULT 17
US-09-173-300-53
; Sequence 53, Application US/09173300
; Patent No. 6451581
; GENERAL INFORMATION:
; APPLICANT: Falco, Saverio Carl
; APPLICANT: Hitz, William D.
; APPLICANT: Kinney, Anthony J.
; APPLICANT: Cahoon, Rebecca E.
; APPLICANT: Rafalski, J. Antoni
; TITLE OF INVENTION: PLANT BRANCHED CHAIN AMINO ACID BIOSYNTHETIC ENZYMES
; FILE REFERENCE: BB-1126
; CURRENT FILING DATE: 1998-10-15
; EARLIER APPLICATION NUMBER: 60/063,423
; EARLIER FILING DATE: 1997 October 28
; NUMBER OF SEQ ID NOS: 54
; SOFTWARE: Microsoft Word Version 7.0A
; SEQ ID NO 42
; LENGTH: 195
; TYPE: PRT
; ORGANISM: Glycine max
; FEATURE:
; NAME/KEY: UNSURE
; LOCATION: (93)
US-09-173-300-42
```


APPLICANT: Falco, Saverio Carl
APPLICANT: Hitz, William D.
APPLICANT: Kinney, Anthony J.
APPLICANT: Canoon, Rebecca E.
APPLICANT: Rafalski, J. Antoni
TITLE OF INVENTION: PLANT BRANCHED CHAIN AMINO ACID BIOSYNTHETIC ENZYMES
FILE REFERENCE: BB-1126
CURRENT APPLICATION NUMBER: US/09/173,300
CURRENT FILING DATE: 1998-10-15
EARLIER APPLICATION NUMBER: 60/063,423
EARLIER FILING DATE: 1997 October 28
NUMBER OF SEQ ID NOS: 54
SOFTWARE: Microsoft Word Version 7.0A
SEQ ID NO 53
LENGTH: 244
TYPE: PRT
ORGANISM: Triticum aestivum
US-09-173-300-53

Query Match
Best Local Similarity 4.8%; Score 195.5; DB 4; Length 244;
Matches 59; Conservative 24; Mismatches 60; Indels 35; Gaps 8;

531 SASVGTSGAGLPKFTILKGLAAPLEKANVDTDAIIPKQFL-----KTIKRTGLGNALF--- 582
49 AAAGSSS--PSSAVFHGCEFWGD-NIDTDQIIPAEHLTVPSKPDYERKLGSAFAGL 105
583 -----YEMRFEDGTGKSDPFLNKEPRKASTLVCTGANFGGSSREHAPALNDFGIRSV 638
106 PSAAYPTFPVAPGSESSRYA-----IIVGANFGGSSREHAPVALGAAGARAI 154
639 IASFPDIFNNFSFKNG-MPIPIKDOAIEAIA--EARGKEIEVDLPNLIKAT 693
155 VAGSYARIFRNSVGTGEVYPLELTD-----VGAMKECKTGDVTVTDLANSVINHT 206

RESULT 18
US-09-173-300-49
Sequence 49, Application US/09173300
Patent No. 6451581
GENERAL INFORMATION:
APPLICANT: Falco, Saverio Carl
APPLICANT: Hitz, William D.
APPLICANT: Kinney, Anthony J.
APPLICANT: Canoon, Rebecca E.
APPLICANT: Rafalski, J. Antoni
TITLE OF INVENTION: PLANT BRANCHED CHAIN AMINO ACID BIOSYNTHETIC ENZYMES
FILE REFERENCE: BB-1126
CURRENT APPLICATION NUMBER: US/09/173,300
CURRENT FILING DATE: 1998-10-15
EARLIER APPLICATION NUMBER: 60/063,423
EARLIER FILING DATE: 1997 October 28
NUMBER OF SEQ ID NOS: 54
SOFTWARE: Microsoft Word Version 7.0A
SEQ ID NO 49
LENGTH: 257
TYPE: PRT
ORGANISM: Oryza sativa
US-09-173-300-49

Query Match
Best Local Similarity 4.6%; Score 187; DB 4; Length 257;
Matches 52; Conservative 20; Mismatches 50; Indels 28; Gaps 5;

557 NVDTDAILPKQFL-----KTIKRTGLGNALF-----YEMRFEDGTGKSDPFLNKEPY 604
86 NIDTDQIIPAEHLTVPSKPDYERKLGSAFAGLPTAAYPFPVAPGSETRYA----- 139
605 RKASLVCTGANFGGSSREHAPALNDFGIRSVIAPSPADIFNNFSFKNG-MPIPIKD 663
140 -----IIVGANFGGSSREHAPVALGAAGARAVVAGEYARIFRNSVATGSEVYPLELAD 194
664 QAQIEAIAAEARAGKEIEVDLPNLIKAT 693

DB 195 TGAMK-----ECKTGDVTVLELNCVMINH 220

RESULT 19
US-09-173-300-44
Sequence 44, Application US/09173300
Patent No. 6451581
GENERAL INFORMATION:
APPLICANT: Falco, Saverio Carl
APPLICANT: Hitz, William D.
APPLICANT: Kinney, Anthony J.
APPLICANT: Canoon, Rebecca E.
APPLICANT: Rafalski, J. Antoni
TITLE OF INVENTION: PLANT BRANCHED CHAIN AMINO ACID BIOSYNTHETIC ENZYMES
FILE REFERENCE: BB-1126
CURRENT APPLICATION NUMBER: US/09/173,300
CURRENT FILING DATE: 1998-10-15
EARLIER APPLICATION NUMBER: 60/063,423
EARLIER FILING DATE: 1997 October 28
NUMBER OF SEQ ID NOS: 54
SOFTWARE: Microsoft Word Version 7.0A
SEQ ID NO 44
LENGTH: 126
TYPE: PRT
ORGANISM: Triticum aestivum
US-09-173-300-44

Query Match
Best Local Similarity 3.4%; Score 137.5; DB 4; Length 126;
Matches 44; Conservative 17; Mismatches 55; Indels 17; Gaps 5;

351 IPVDKVFISGCTNSRIEDLRAAAIVKGRKAPNVKSAMVPGGLVKTQAEELDKIF 410
2 IAAKVPLFVLAGS-----KKVYPTFLVPATQKVMMDVYSLPVGSG-----GTCQIIF 49

411 EEAQFEM-REAGCMICGMNDIAPQER---CASTSNRPNEGQG-AGGRTHLSMPMA 465
50 EEAQDTPASPCGACGGRDVTYARNNEPTVCVTNRNPFGRMGHEGQIYIASPTA 109

466 AAAGIVGLADVR 478
110 AASALGTGYDPR 122

RESULT 20
US-09-268-347-36
Sequence 36, Application US/09268347
Patent No. 6335182
GENERAL INFORMATION:
APPLICANT: Loosmore, Sheena M.
TITLE OF INVENTION: RECOMBINANT HAEMOPHILUS INFLUENZAE ADHESIN PROTEINS
FILE REFERENCE: 1038-860
CURRENT APPLICATION NUMBER: US/09/268,347
CURRENT FILING DATE: 1999-03-16
NUMBER OF SEQ ID NOS: 54
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 36
LENGTH: 2411
TYPE: PRT
ORGANISM: Haemophilus influenzae
US-09-268-347-36

Query Match
Best Local Similarity 3.2%; Score 131.5; DB 4; Length 2411;
Matches 167; Conservative 107; Mismatches 342; Indels 213; Gaps 37;

41 VTSPOAFEGLNAGKRVRRPDCTLATTDHNVPTTSRKALKDI--ASFKEQDSR---TQC 95
918 VTVTQKADG---KGADVIGAKTSVIKDHNGKLFTGKDLKDANNACATVSEDDGKTGTGL 974
96 VTLEB-----NVKRGVTVFGLSDKRGQIVHVIQEGQFTLPCTTVVCGDSSHSTHGAFG 150

```
Db 975 VTAKTVIDAVNKSGRVVTGEGAT-----AETG-----ATAVNAGNAETVTSGT-- 1017
QY 151 ALAFGIGTSEVHLVATQCLITKRSKNMIRIQVDGELAPGV---SSKDVVLHAIGIIGTAG 207
Db 1018 SVNFKNGN-----ATTATVSKDNGNINVKYDVNNGDLKIGDDKKIVADTTTLTVTGG 1070
QY 208 -----GTGAV-----IFCGSVIRLSMEARM-SICNMSIEGGARAGVAPDEITF 252
Db 1071 KVSVPAGANSVNNKKLVNABGLATALNLSWTAKADKYADGESGETDQEVKAGDKVTF 1130
QY 253 EYLKGRPLAPKYDSEPHKATQYWKNLQSDPGAKYDIDVFDKADIVPTLTWGTSPEDVV 312
Db 1131 -----KAGNLUKVQSEKDFYSLQ-----DTLTGLTS-----I 1159
QY 313 PITGVVDPPEFATFAKADGRRLQYMLKAGTQMED---IPVDKVFIGSCTNSRIIDL 369
Db 1160 TLGGTANGRNDTGTVINK-DGLTITLANGAAAGTASNGNTISVTKDGI-SAGNKEIINV 1217
QY 370 RAAAVVVKGRKA-----PNVKSANVV-----PGSLVKTOAEEDGLDKIFEEAGF 415
Db 1218 KSALKTKYKDTQNTAGATQPAANTAEVAKQDLVLDLTKPATGAAGNADAKAPDTTAAATVG- 1276
QY 416 EWEAGGSCMLGNPDILAPQERCASTSNRN---FEGRQGA-----GGRTHLMSPVMA 465
Db 1277 DLRLGLVLSAKKTADTQDKEFHAAVKNANEVEFVGKNGATVSAKTDNNKGHTVTDIVA 1336
QY 466 AAGAGIVGKLAD-VRLKTDYKASPHIAAYQKSVTKPHVDERINQDAHEKDIADIPEDNN 524
Db 1337 EA-----KVGDLKEDTDGKI-----KLKVDNTDGNLLTVDATKGASVA--KGEFN 1381
QY 525 GPTNTSASVGTSAKLPKFTILKG-----IAAPLEKANVDTDAIIPKQFLKTIKRTGLGNA 580
Db 1382 AVTTDATTAGQTNANERGVVVGKSGNATATETDKKXVATVGDVAK-----AINDA 1432
QY 581 LFYEMRFNEDGT---EKSDPVLNKEPYRKASILVCTGANFGCGSSREHAPWAL-NDPFI 635
Db 1433 ATPVKVENDSATIDSDPTDGDANDALKAGDTLTLLKAGNLUKVREDGKNITFALANDLSV 1492
QY 636 RSV-----IAPSFADIFPN----- 649
Db 1493 KSATVSDKLSLGTNGNKNVNTSDTKGLNFAKDSKTGDANIHLNGIASLTDLTLNSGAT 1552
QY 650 --NSFKNGMLPIPTKDOAQIEAIAAARAGKEIEVDLPNQLIKNATGETICTFEVEEERKH 708
Db 1553 TNLGGNGITNEKRAASVKDVLNAGNVNVRGVKSPASANNQVENT--DFVATYDTWDF--- 1607
QY 709 CLVNG-LDDIGLTQWEMDKIAEPEAKMTRTPMLDGTGYLKRKGQGGKL 756
Db 1608 --VSGDKDTSVTVESKDNKGRTEVKIGAKTSVI-----KDHNGKL 1646
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RESULT 21

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US-08-409-995-4
; Sequence 4, Application US/08409995
; Patent No. 5646259
; GENERAL INFORMATION:
; APPLICANT: Barenkamp, Stephen I.
; APPLICANT: St. Gene III, Joseph W.
; TITLE OF INVENTION: Haemophilus Adhesion Proteins
; NUMBER OF SEQUENCES: 6
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Flehr, Hobbach, Test, Albritton & Herbert
; STREET: Four Embarcadero Center, Suite 3400
; CITY: San Francisco
; STATE: CA
; COUNTRY: USA
; ZIP: 94111-4187
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
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; APPLICATION NUMBER: US/08/409,995
; FILING DATE: 24-MAR-1995
; CLASSIFICATION:
; ATTORNEY/AGENT INFORMATION:
; NAME: Silva, Robin M.
; REGISTRATION NUMBER: 38,304
; REFERENCE/DOCKET NUMBER: A-61053/RPT
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 781-1989
; TELEFAX: (415) 398-3249
; TELEX: 910 277299
; INFORMATION FOR SEQ ID NO: 4:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 1912 amino acids
; TYPE: amino acid
; STRANDEDNESS: double
; TOPOLOGY: unknown
US-08-409-995-4
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Query Match 3.1%; Score 124.5; DB 1; Length 1912;
Best Local Similarity 19.9%; Pred. No. 0.017;
Matches 163; Conservative 100; Mismatches 302; Indels 255; Gaps 37;

QY 41 VTSPQAFGLRNAGRKVRPPDCTLATTDHNVPTTSKALKDI--ASFIKEDDSR---TQC 95
Db 919 VTVTKADG---KGADVKGIAKTSVIKDHNGKLTGKDLKDANNGATVSEDDGKDTGTGL 975
QY 96 VTLEB-----NVKEFGVTYFGLSDXKRGIVHVGPEQGTLPQTTVVCGDSHTSHGAPG 150
Db 976 VTAKTVIDAVNKSGRVVTGEGAT-----AETG-----ATAVNAGNAETVTSGT-- 1018
QY 151 ALAFGIGTSEVHLVATQCLITKRSKNMIRIQVDGELAPGV---SSKDVVLHAIGIIGTAG 207
Db 1019 SVNFKNGN-----ATTATVSKDNGNINVKYDVNNGDLKIGDDKKIVADTTTLTVTGG 1071
QY 208 -----GTGAV-----IFCGSVIRLSMEARM-SICNMSIEGGARAGVAPDEITF 252
Db 1072 KVSVPAGANSVNNKKLVNABGLATALNLSWTAKADKYADGESGETDQEVKAGDKVTF 1131
QY 253 EYLKGRPLAPKYDSEPHKATQYWKNLQSDPGAKYDIDVFDKADIVPTLTWGTSPEDVV 312
Db 1132 -----KAGNLUKVQSEKDFYSLQ-----DTLTGLTS-----I 1160
QY 313 PITGVVDPPEFATFAKADGRRLQYMLKAGTQMED---IPVDKVFIGSCTNSRIEDL 369
Db 1161 TLGGTANGRNDTGTVINK-DGLTITLANGAAAGTASNGNTISVTKDGI-SAGNKEIINV 1210
QY 370 RAAAVVVKGRKAAPNVKSANVVVGSLVKTOAE-----EEGLDKIFEEAGFEWREAGCSM 424
Db 1211 -----GNKEITNVKSAL-----KTYKDTQNTADTQDKEFH----- 1241
QY 425 CLGMNPDLAPQERCASTSNRN---FEGRQGA-----GGRTHLMSPVMAAAGIVGKL 474
Db 1242 -----AAVKNANEVEFVGKNGATVSAKTDNNKGHTVTDIVA-----KV 1281
QY 475 AD-VRLKTDYKASPHIAAYQKSVTKPHVDERINQDAHEKDIADIPEDNNGPHTNTSAS 533
Db 1282 GDGLEKDTDGI-----KLKVDNTDGNLLTVDATKGASVA--KGEFNAVTTDATTA 1331
QY 534 VGTSAKLPKFTILKG-----IAAPLEKANVDTDAIIPKQFLKTIKRTGLGNALFYEMRFE 589
Db 1332 QGTNANERGVVVGKSGNATATETDKKXVATVGDVAK-----AINDAATFVKVEND 1382
QY 590 DGT-----EKSDPVLNKEPYRKASILVCTGANFGCGSSREHAPWAL-NDPFI 638
Db 1383 DSATIDSDPTDGDANDALKAXDTLTLLKAGNLUKVREDGKNITFALANDLSVKSATVSDKL 1442
QY 639 -----IAPSFADIFPN-----NSFKNGML 657
Db 1443 SLGTNGNKNVNTSDTKGLNFAKDSKTGDANIHLNGIASLTDLTLNSGATNLGGNGIT 1502
QY 658 PIPTKDOAQIEAIAAARAGKEIEVDLPNQLIKNATGETICTFEVEEERKHCLVNG-LDD 716
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Qy 639 -----IAPSFADIFFN-----NSFKNGML 657
Db 1444 SLGTNGNKVNITSDTKGLNPAKDSKTGDDANIHNLGIASTLTDTLNSGATNLCGNGIT 1503
Qy 658 PIPKQAOQIEALIAAEARAKEIEVDLPNOLIKNATGETICTFEVEEPRKGLVNG-LDD 716
Db 1504 DNEKKAASVKDVLNAGMNVGVKVPASANNQVENI--DFVATYDVDF-----VSGDKDT 1556
Qy 717 IGLTMQMEDKIAEFKAKTRTPWLDGTGYLKRKGQGKL 756
Db 1557 TSVTVESKDKGRTEVKIGAKTSVI-----KDHNGKL 1588

RESULT 25
; Sequence 33, Application US/09669974
; Patent No. 6333173
; GENERAL INFORMATION:
; APPLICANT: PEAK, Ian Richard Anselm
; APPLICANT: JENNINGS, Michael Paul
; APPLICANT: MOXON, E. Richard
; TITLE OF INVENTION: NOVEL SURFACE ANTIGEN
; FILE REFERENCE: 065064/0128
; CURRENT APPLICATION NUMBER: US/09/669,974
; PRIOR FILING DATE: 2000-09-26
; PRIOR APPLICATION NUMBER: US 09/377,155
; PRIOR FILING DATE: 1999-08-19
; PRIOR APPLICATION NUMBER: PCT/AU98/01031
; PRIOR FILING DATE: 1998-12-14
; PRIOR APPLICATION NUMBER: GB 9726398.2
; NUMBER OF SEQ ID NOS: 33
; SOFTWARE: Patentin Ver. 2.0
; SEQ ID NO 33
; LENGTH: 2353
; TYPE: PRT
; ORGANISM: Haemophilus influenzae
; US-09-669-974-33

Query Match 3.0%; Score 122.5; DB 4; Length 2353;
Best Local Similarity 19.9%; Pred. No. 0.038;
Matches 163; Conservative 100; Mismatches 302; Indels 255; Gaps 37;

Qy 41 VTSPOAFEGRLNAGRKRRPRDCTLATTDHNVPTTSRKALKDI--ASFKEDDSR---TQC 95
Db 920 VTYTQKADG---KGADYKIGAKTSVIKDHNGKLPTGDKLKDANNKATVSEDDGKDTGTL 976
Qy 96 VTLEE-----NVKEFGVTVFGLSDKROGIVHVGPEOGFTLPGTTVCCGDSHTSTHGAFG 150
Db 977 VFAKTVIDAVNKSQMRVTGEGAT-----AETG---ATAVNAGNAETVTSGT-- 1019
Qy 151 ALAFGIGTSEVENHLATOCILTKRSKMRIOVDGELAPGV---SSKDVVLAHIGIITAG 207
Db 1020 SVNFKGN-----ATTATVSKDNGNINVKYDVAVNGDLKIGDDKKIADTTTLTLVTGG 1072
Qy 208 -----GTGAV-----IIFCGSVIRLSMEARM--SICNMSIEGAPAGVAPDEITF 252
Db 1073 KVSVPAGANSVNNKKJLVNABGLATALNLSWTAKADKYADGSEGETDQEVAKDXYTF 1132
Qy 253 EYLKGRPLAPKYSPEWHKATQYWKNLQSDPAKYDIDVFIDAKDIVPLTLTWGTSPEDEV 312
Db 1133 -----KAGKNLKVQSEKDFYSLQ-----DTLTGLTS-----I 1161
Qy 313 PITGVVDEPETFAEAKKADRRMLQYWGKLKAGTMEG---IPVDKVFIGSCTNSRIEDL 369
Db 1162 TLGGTANGRNDGTGVINK-DGLTTLTLAGAAAGTASNGNTISVTKDGISA----- 1211
Qy 370 RAAAAVVGKRRKAPNVKSAWVPSSGLVKTQAE-----EEGLDKIFEEAGFEWRBAGCSM 424
Db 1212 -----GKKEITNVKSAL-----KTYKDTONTADETQDKFEH----- 1242
Qy 425 CLGNPDIILAPQERCASTSNEN---FEGRQGA-----GGRTHLMSPVMAAAAGIVGKL 474
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Db 1243 -----AAVKNANEVEFVGKNGATVSAKTDNNGHVTVTIDVAEA-----KV 1282
Qy 475 AD-VKRLTQYKASPHIAAYOKSTVTPHYDERINQDAHEKDIADIPEDNNGPHNTNSAS 533
Db 1283 GGGLEKDTDGKI-----KLKVDPTDGNLLTVDATKASVA--KGEFNATVTTDAITTA 1332
Qy 534 VQTSAGLPRFTILKG---IAPLEKANYPTDAIIPKQFLKTIKRTGLGNALFYEMKRFNE 589
Db 1333 QGTNNANERKVVVKGNGATATETDCKKVAATVGDVAK-----AINDAATFVKVEND 1383
Qy 590 DGT-----EKSDVLANKEPRKASIIIVCTGANFCCGSSREHAPAL--NDPGRISV----- 638
Db 1384 DSATIDSPPTDGDANDALKAQDTLTLKAGKNLKVKKDGNKITFALANDLSVKSATVSDKL 1443
Qy 639 -----IAPSFADIFFN-----NSFKNGML 657
Db 1444 SLGTNGNKVNITSDTKGLNPAKDSKTGDDANIHNLGIASTLTDTLNSGATNLCGNGIT 1503
Qy 658 PIPKQAOQIEALIAAEARAKEIEVDLPNOLIKNATGETICTFEVEEPRKGLVNG-LDD 716
Db 1504 DNEKKAASVKDVLNAGMNVGVKVPASANNQVENI--DFVATYDVDF-----VSGDKDT 1556
Qy 717 IGLTMQMEDKIAEFKAKTRTPWLDGTGYLKRKGQGKL 756
Db 1557 TSVTVESKDKGRTEVKIGAKTSVI-----KDHNGKL 1588
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Search completed: March 17, 2003, 08:51:19
Job time : 39 secs

